Wallace, Kan., 0.28 in.; Boise City, Idaho, 0.30 in.; Campo, Cal., 0.31 in.; San Buenventura, Cal., 0.34 in.; Concho and Boerne, Tex., 0.40 in.

Drought.—Milton, Fla., 31st, very dry month, ground too dry for seed to germinate. Forsyth, Ga., 22nd, many wells have failed; water courses so low that mills are only partially able to do their work. Vail, Iowa, 31st, ground very dry. Clarksville, Tex., first half of month severe drought. Austin, Tex., 31st, most severe drought ever known here.

Hail.—Fort Porter, N. Y., 30th; Summit, Col., 5th; New Harmony, Ind., 5th, 6th; Vevay, Ind., 18th, 22nd, 27th, 30th; Guttenburg, Ia., 1st, 8th; Cresco, Ia., 8th, 10th; Tabor, Ia., 15th, Boonsboro, Ia., 10th, Independence, 17th; Fort Madison, Ia., 8th; Creswell, Kan., 3rd, 16th, 26th; Bowling Green, Ky., 27th; Springfield, Mass., 9th; Grand Rapids, Mich, 5th, 8th; Northport, Mich., 17th; Oregon, Mo., 6th, 16th; South Hartford, N. Y., 9th; Cape Vincent, N. Y., 29th, 31st; Margarette, Ohio, 27th; West Charlotte Vt., 31st; Leavenworth, Kan., 10th; Burlington, Ia., 8th; near Cleveland, Ohio, 18th; Newport, R. I., 31st.

Rainy Days.—The number of days on which snow or rain has fallen varies as follows: New England, 8 to 18; Middle States, 7 to 12; South Atlantic States, 5 to 10; Gulf States, 5 to 12th; Ohio valley and Tennessee, 9 to 15; Lower Lake Region, 12 to 18; Upper Lake Region 15 to 22; Upper Mississippi Valley, 9 to 14; Lower Missori Valley, 6 to 13; Northwest, 9 to 13; Rocky Mountains, 0 to 10; Western Plateau, 0 to 8; Pacific Coast, 1 to 3,

Cloudy Days.—For New England the number varies from 8 to 14; Middle States, 5 to 10; South Atlantic States, 5 to 9; Gulf States, 4 to 20; Ohio Valley and Tennessee, 6 to 11; Lower Lake Region, 6 to 14; Upper Lake Region, 11 to 14; Upper Mississippi Valley, 3 to 12; Lower Missouri Valley, 5 to 9; extreme Northwest, 9 to 21; Rocky Mountains, 0 to 12; Western Plateau, 0 to 3; Pacific Coast, 1 to 0.

Snow.—5th, Kan. 6th, Md., N. H. 8th, Dak. 9th, Kan, 10th, Kan. 11th, N. M., Kan. 13th, Wy. Ty. 16th, Dak., Neb., Wy. Ty. 17th, Minn., Ind., Ia., Dak. 18th, Mich. 19th, N. Y., N, H. 20th, Wy. Ty., N. Y., Vt. Kan., N. H. 21st, Neb., Dak., Ia. 22nd, Kan., Ill. 23rd, Neb., Wy. Ty., Kan., Dak., Me. 24th, Dak., Neb., Wy. Ty., Ia., N. Y., Col., Mich. 25th, Kan., Neb., Col., Dak., Mich. 26th, Kan., Neb., Ill., Ind., Ia., Mich., Mon., Ia., Mich., N. Y., Ohio, Pa., Wis., N. H. 29th, Dak., Minn., Ohio, Wis., Ill., Pa., N. H. 28th, Dak., Minn., la., Mich., N. Y., Ohio, Pa., Wis., N. H. 29th, Dak., Minn., N. Y., Ia., W. Va., Wis., Neb., Mich., Ohio. 30th, Ill., Ind., N. Y., Ohio, Wis., Ia., Mich., W. Va. 31st, N. Y., Ind., Md., Ohio, Pa., Va., W. V., Mich., Tenn., N. H. At the end of the month the depth of snow on ground was reported as follows: Cincinnati, Ohio, trace; Ringgold, Ohio, 1 inch; Pembina, Dak., 1 in.; St. Paul and Duluth, Minn., 1 in.; Marquette, Mich., 4½ in.; Escanaba, Mich., trace; Madison, Wis., ½ in.; Chicago, Ill., ½ in.; Grand Haven, Mich.; ½ in.; Alpena, Mich., 1 in.; Cleveland Ohio, trace; Rochester, 1-5 in.; Oswego, ½ in.; Columbus, Ohio, ½ in.; Mt. Washington, N. H., 2 in. On the 12th, the observer at New Westminster, B. C., reported the snow on mountains almost to winter-line, one mouth earlier than the mean for the last five years. Heavy snow fell at the base of Pike's Peak October 26th and 27th, while but little fell on the summit, where the weather has been remarkably mild and pleasant. At Summit C. P. R. R., 12.13 inches of snow fell during the month.

## RELATIVE HUMIDITY.

The average percentage of relative humidity for the month ranges as follows: New England 65 to 80; Middle Atlantic States, 62 to 77; South Atlantic States, 69 to 79; East Gulf States, 67 to 76; West Gulf States, 65 to 71; Lower Lake Region, 63 to 73; Upper Lake Region, 67 to 73; Ohio Valley and Tennessee, 59 to 71; Upper Mississippi Valley, 60 to 65; Lower Missouri Valley, 54 to 61; Red River of the North Valley, 69 to 78; Eastern Slope, from Dakota to interior of Texas, 52 to 70; Western Plateau, 24 to 54; California, 41 to 73. High stations report the following not corrected for altitude: Mt. Washington, 88; Virginia City 60; Cheyenne; 47; Denver, 28; Santa Fe, 23.

## WINDS.

The prevailing winds at the Signal Corps stations are shown by arrows on chart No. II, by an examination of which it will be seen that they have been northerly along the Middle and South Atlantic States; southerly in New England and from the Lower Lakes to the Southwest, and northwesterly in the Upper Lake region, the Northwest and thence westward.

Total Movements of the Air.—The following are the largest monthly movements recorded at the Signal Corps stations, viz: Cape May, 13,478 miles; Portsmouth, N. C., 12,292; Cape Lookout, 12,162; Kittyhawk, 11,841; Sandy Hook, 11,776; Thatchers' Island, 10,813; Dodge City, Kan., 10,558; Sandusky, 10,430; Cape Henry, 10,289; Barnegat, 10,152; Milwaukee, 10,150; Breckenridge, 10,115; Key West, 10,101; Grand Haven, 9,957; Fort Sill, Ind. Ty., 9,836. The smallest are: Visalia, Cal., 1,574 miles; Knoxville, 1,666; Lynchburg, 2,208; Augusta, 2,509; Uvalde, Tex, 2,625; Nashville, 2,764; Los Angeles, 2,869; Boise City, Idaho, 3,398; Davis, Tex., 3,463; Eagle Pass, Tex., 3,508; Montgomery, 3,636; Shreveport, 3,667; Springfield, 3,923; Fort Craig, N. M., 3,703; San Diego, Cal., 3,872.

## VERIFICATIONS.

Indications.—The detailed comparison of the tri-daily weather indications, with the telegraphic reports for the succeeding twenty-four hours, show the greatest percentage of omissions to be 0.4 per cent., and of